

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-12 (cancelled)

13. (currently amended) A material system for use in 3D-printing comprising:

a powder comprised of particles,

a solvent,

a binder soluble in the solvent, and

optionally, filler materials,

wherein the material system contains two complementary polyelectrolytes and/or an initiator for a crosslinking reaction of the binder.

14. (currently amended) A material system ~~according to Claim 13,~~ for use in 3D-printing comprising:

a solvent,

a binder soluble in the solvent, and

optionally, filler materials,

wherein the material system contains two complementary polyelectrolytes and/or an initiator for a crosslinking reaction of the binder, and

wherein the two complementary polyelectrolytes are contained in two binders, respectively, or in a binder and in the solvent.

15. (previously presented) A material system according to claim 13, wherein the initiator is contained in the solvent or in the one or both binders.
16. (previously presented) A material system according to claim 15, wherein the initiator is a photoinitiator.
17. (previously presented) A material system according to claim 13, wherein the filler material is coated with the binder.
18. (previously presented) A material system according to claim 13, wherein the material system is residual-ash-poor.
19. (previously presented) A material system according to claim 13, wherein the material system is flowable in an autoclave.
20. (currently amended) A material system according to claim 13, wherein at least a substantial portion of the powder ~~filler material~~ and binder is in the form of rounded-off particles.
21. (previously presented) A material system according to Claim 20, wherein average particle diameter of said particles is smaller than approximately 40 μm .
22. (currently amended) A material system ~~according to Claim 13,~~ for use in 3D-printing comprising:
a solvent,
a binder soluble in the solvent, and
optionally, filler materials.

wherein the material system contains two complementary polyelectrolytes and/or an initiator for a crosslinking reaction of the binder, and

wherein the filler material is comprised of wax, PS, PMMA or POM.

23. (previously presented) A material system according to claim 13, wherein the filler material is comprised of metal, ceramic or carbide.
24. (previously presented) A material system according to claim 13, wherein the binder is comprised of a water-soluble polymer.
25. (previously presented) A material system according to claim 24, wherein the water-soluble polymer is PVP or a copolymer thereof.
26. (currently amended) A material system ~~according to Claim 13,~~ for use in 3D-printing comprising:
a solvent,
a binder soluble in the solvent, and
optionally, filler materials,
wherein the material system contains two complementary polyelectrolytes and/or an initiator for a crosslinking reaction of the binder, and
wherein the binder comprises less than 10 weight percent of the material system.
27. (previously presented) A process for producing a three dimensional shape, the process comprising:

(a) providing a layer of a solvent-soluble binder and, optionally, filler materials,

(b) printing said layer with a solvent in a pattern to activate said binder,

(c) repeating steps (a) and (b) until said three-dimensional shape is formed,

wherein the material system comprised of binder, solvent and optionally filler materials contains two complementary polyelectrolytes and/or an initiator for a crosslinking reaction of the binder.